

REMARKS

Claims 1-46 are pending in the subject application with entry of this paper.

Applicant acknowledges the indicated allowability of Claims 17-22.

Applicant has cancelled duplicate Claims 6 and 7 and has added new Claims 45 and 46 having the claimed subject matter in duplicate Claims 6 and 7. No new matter has been added.

Claims 1-16 and 23-44 stand rejected.

Information Disclosure Statement

At paragraph 2 of the Action, the Office did not consider five items of information contained on Applicant's Information Disclosure Statement of March 24, 2008 because the IDS allegedly failed to comply with the provisions of 37 C.F.R. §§ 1.97, 1.98 and MPEP § 609. The Examiner's premise for not considering this information was because these entries failed to "list year and month of publication."

There is no requirement whatsoever in 37 C.F.R. §§ 1.97 or 1.98 to "list year and month of publication." 37 C.F.R. § 1.97 is silent regarding dating of publications; however, 37 C.F.R. § 1.98(b)(5) squarely addresses the issue: "Each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, *date* and place of publication." (emphasis supplied). There simply is no basis in the C.F.R. to support the Office's contention to list both year and month of publication. Applicant has, however, submitted concurrently with this paper a supplementary Information Disclosure Statement identifying additional dating (as could reasonably be found) of the five publications not considered by the Office. A courtesy copy

of the supplementary IDS is attached hereto as Exhibit A. Consideration of these five publications *previously submitted* in Applicant's IDS filed March 24, 2008 is requested.

Rejections under 35 U.S.C. § 112

At paragraph 4 of the Action, the Office improperly rejected Claims 6 (now 45), 7 (now 46), 16 and 32 under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the enablement requirement. Applicant does not understand the reasoning for this rejection.

For example, support for the claim elements in duplicate Claim 7 (now 46) and Claim 16 is found at least in paragraph [0042]. This claimed subject matter is unambiguously supported in the specification. Further, support for the claim elements in duplicate Claim 6 (now 45) and Claim 32 is found at least in paragraph [0054]. This claimed subject matter is also unambiguously supported in the specification.

Reconsideration and withdrawal of the rejection of Claims 6 (now 45), 7 (now 46), 16 and 32 are respectfully solicited.

Rejection under 35 U.S.C. § 102

At paragraph 6 of the Action, the Office improperly rejected Claims 1-8, 10-14, 26-31 and 33-44 under 35 U.S.C. § 102(e) as being anticipated by Durrant. It appears that the rejection is premised upon a misunderstanding of what Durrant fairly teaches. Applicant submits that Durrant fails to teach or disclose each and every element of Claims 1-8, 10-14, 26-31 and 33-44 and respectfully requests reconsideration and withdrawal of the rejection thereof.

Claim 1 is instructive in this instance and recites:

In a communication system including a first node, a second node, and a repeater that applies a known modification to a primary communication signal passing therethrough that identifies the repeater, where the first node receives a first signal from the second node either directly or via the repeater, and where the first signal includes a primary communication signal and, if the first signal is received from the repeater, also includes a signature signal that is a function of the primary communication signal and the known modification applied by the repeater,

the method of determining if a signal received by the first node is received directly from the second node or indirectly through the repeater, comprising the steps of:

receiving the first signal at the first node;

extracting the primary communication signal from the first signal;

producing a candidate signature signal as a function of the primary communication signal and the known modification applied by the repeater; and

determining whether the first signal has been received from the repeater by processing of the candidate signature signal and at least a portion of the first signal. (emphasis supplied)

Independent Claims 10 and 26 recite similar elements.

While Durrant discloses determining whether a signal passes through a radio frequency (RF) repeater, Durrant does so in a fundamentally different process. For example, Durrant teaches using an LMU-B including a TOA receiver to measure propagation time delay between a mobile unit uplink signal and the LMU-B. *See* 9:52-55. Due to the addition of RF signal repeaters in the network, Durrant teaches using FSK modulation to generate a unique signal tag (shifting the local oscillator signal, mixed with the mobile station signal to generate a translated mobile station signal, up or down in frequency according to the command from the base station). *See* 10:8-12; 5:65-6:26. The unique signal tag is detected by the frequency discriminator in the LMU-B to generate a repeater ID. *See* 10:9-12. Since the repeated signal now has a ***repeater tag ID***, the LMU-B or MLC can distinguish the repeated signal from a signal received directly from a mobile

appliance. *See* 10:9-12; 4:61-66; 3:14-18. *Thus, it is this tagging, rather than the determination of whether the first signal has been received from the repeater by the processing of any candidate signature signal and a portion of the first signal, that allows Durrant to determine whether or not a signal has passed through a repeater or whether a signal has been received directly from a mobile appliance.*

Thus, Durrant's insertion of a repeater tag ID simply cannot support the Office's reading of the claimed subject matter of independent Claims 1, 10 and 26 on Durrant. As disclosed in Applicant's specification at paragraph [0044]:

An important aspect of the disclosed subject matter that needs to be highlighted is that the signature signal [] is formed as a function of the primary signal and the second signal. The signature signal is not the second signal available at the repeater which is added onto the primary signal. The signature signal differs based not only on the particular repeater but also on the primary signal that is input to the repeater.

See paragraph [0044]. Clearly, the teachings of Durrant diverge from the claimed subject matter in this regard.

By way of further example, it also appears that it is the Office's position that a unique signal tag reads on the claimed second signal in Claim 10. To the contrary, Durrant's unique signal tag is, as explained above, merely an FSK modulation of a transmitted signal detected by a frequency discriminator to generate a repeater tag ID. *See* 10:5-12. Thus, the unique signal tag is a modulation of the same signal. A repeater tag ID is also not a second signal or a signature signal as claimed as the repeater tag ID is disclosed by Durrant as information employed with TOA measurements and coupled to the MLC to locate a mobile device. *See* 10:13-18. Clearly, the Office's rejection of independent Claims 1, 10 and 26 under Section 102(e) is premised upon a misunderstanding and

subsequent misapplication of Durrant. Reconsideration and withdrawal of the rejection of independent Claims 1, 10 and 26 are respectfully solicited.

Claims 2-8, 11-14, 27-31 and 33-44 are dependent upon independent Claims 1, 10 and 26. Independent Claims 1, 10, and 26 are in condition for allowance. Dependent Claims 2-8, 11-14, 27-31 and 33-44 are thus patentable without regard to the additional patentable elements defined therein. Reconsideration and withdrawal of the rejection of Claims 1-8, 10-14, 26-31 and 33-44 under Section 102 are respectfully solicited.

Rejection under 35 U.S.C. § 103(a)

At paragraph 7 of the Action, the Office improperly rejected Claims 9, 15 and 23-25 under 35 U.S.C. § 103(a) as being unpatentable over Durrant. Claims 9 and 15 are dependent upon independent Claims 1 and 10. Independent Claims 1 and 10 are in condition for allowance. Dependent Claims 9 and 15 are thus patentable without regard to the additional patentable elements defined therein, and reconsideration and withdrawal of the rejection thereof is respectfully solicited.

With regard to Claim 23, however, it appears that the Office is attempting to rewrite the Graham factual inquiries to fabricate a rejection of independent Claim 23 and its dependent claims. Claim 23 recites:

A wireless communication system having a plurality of repeaters and a network overlay geolocation system, said geolocation system having a plurality of wireless location sensors for measuring an attribute of an uplink signal of a mobile appliance for determining the location of the mobile appliance based on the attribute and the location of the wireless location sensors, the improvement wherein each of the plurality of repeaters have *an associated unique AM Golay Hadamard sequence and a signal multiplier for applying the associated unique AM Golay Hadamard sequence to a copy of the uplink signal received from the mobile appliance.* (emphasis supplied).

The Office, however, took official notice that an AM Golay Hadamard sequence is a type of code and concluded that it would have been obvious to substitute the AM Golay Hadamard sequence to obtain a predictable result. *This conclusion is utterly unfounded and is improper.*

The Office seems to incorrectly think that the disclosure of a genus necessarily renders obvious a species. Durrant does indeed state that a binary or M-ary code could be imposed on the repeated signal. This code would uniquely identify a given RF signal repeater. See Durrant at 5:7-10. But concluding, as the Office did, that the mere disclosure of a binary or M-ary code reads on all types of codes or sequences is simply ludicrous, without evidentiary support in the record, and utterly ignores advantages and disadvantages between the plurality of types of codes available in the art. As the Office is aware, there must be some form of evidence in the record to support an official notice. See MPEP § 2144.03; *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (holding that general conclusions without specific factual findings and concrete evidence in the record to support these findings will not support an obviousness rejection).

A binary code may be generally employed to detect/correct errors in a binary symmetrical channel. Exemplary binary codes are repetition codes, single-parity-check codes, and the like. Such binary codes and respective channels are inefficient as they provide low information rates. M-ary codes may generally be non-linear and may be employed on Uniform Discrete Symmetric Channels consisting of M^n symbols. M-ary codes suffer from similar problems as binary codes but have a higher information rate than their binary counterparts. A Golay code is generally a class of error-correcting codes

constructed utilizing a parity-check matrix (if a ternary Golay code) or constructed utilizing a vector of a 12 dimensional subspace (if a binary Golay code), to name a few. Further, a Hadamard code is an entirely different class of code constructed through the application of matrix theory, in particular, Hadamard matrices.

Applicant, however, did not merely claim one specific code but rather claimed an Amplitude Modulated Golay Hadamard sequence, which clearly, is more than just a “simple substitution of one known element for another to obtain predictable results” as asserted by the Office and is neither a simple binary or M-ary code but rather a complex coded sequence. To rely on an unfounded proposition, as the Office has done here, is both factually incorrect and legally improper. *As Applicant has noted that the Office’s supposition is improper, Applicant requests the Office produce authority for its official notice.* See MPEP § 2144.03; *Zurko*, 258 F.3d at 1386; *In re Chevenard*, 139 F.2d 71, 73 (CCPA 1943). For the reasons discussed above, Applicant submits that Durrant fails to provide a *prima facie* case of obviousness, and Applicant respectfully requests withdrawal of the rejection under § 103(a) of independent Claim 23 and those claims dependent thereon.

CONCLUSION

Applicant believes that the present application is in condition for allowance and, as such, it is earnestly requested that Claims 1-46 be allowed to issue in a U.S. Patent.

If the Examiner believes that an in-person or telephonic interview with the Applicant's representatives will expedite the prosecution of the subject patent application, the Examiner is invited to contact the undersigned agents of record.

The Office is requested and hereby authorized to charge the appropriate extension-of-time fees against **Deposit Account No. 04-1679** to Duane Morris LLP.

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EXHIBIT A